

What is claimed is:

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1. A method for determining computer hardware requirements for a database management system server comprising the steps of:

obtaining at least one user defined workload requirement;

calculating the database management system server hardware requirements as a function of said user defined workload requirement; and

displaying said database management system requirements.

2. A method according to claim 1, wherein said user defined workload requirement includes a plurality of inputs from a user including a server type, a maximum desired processor utilization, and a transactions per second requirement.

3. A method according to claim 1, wherein said outputs include a number of processors requirement, a memory size requirement, and a mass storage requirement.

4. A method according to claim 1, wherein said outputs further comprise properties including an effective CPU utilization.

5. A method according to claim 1, wherein said outputs further comprise properties including a number of users supported.

6. A method according to claim 1, wherein said outputs further comprise properties including an effective CPU utilization and a number of users supported.

1        7.     A computerized method for determining computer hardware  
2 requirements for a database management system server as recited in claim 7, wherein  
3 said inputs include a baseline system transactions per second and said properties  
4 include a calculated transactions per second value, and a ratio of said calculated  
5 transactions per second to said baseline transactions per second, wherein said  
6 calculating step calculates values for said calculated transactions per second and said  
7 transactions per second ratio.

1        8.     A method for determining computer hardware requirements for a database  
2 management system server using a user-defined workload, the method comprising the  
3 steps of:  
4             obtaining at least one input from a user;  
5             obtaining from said user a plurality of transactions, wherein each of said  
6 transactions have a transaction workload contribution and an expected execution rate  
7 per second;  
8             calculating a total workload as a function of said transactions, transaction  
9 workload contribution, and transaction execution rate; and  
10            display said total workload to said human user.

1        9.     A method according to claim 8, wherein said inputs include a server  
2 type.

1        10.    A method according to claim 8, wherein said inputs include a  
2 maximum desired processor utilization.

1        11. A method according to claim 8, wherein said inputs include a  
2        maximum desired network interface card utilization.

1           12.    A method according to claim 8, wherein said inputs include a server  
2    type, a LAN speed, a maximum desired processor utilization, a maximum desired  
3    network interface card utilization.

1           13.     A method according to claim 12, wherein each of said transactions  
2     include at least one SQL statement wherein each of said transaction workloads are  
3     calculated by calculating a workload contribution of each of said SQL statements and  
4     wherein a percent contribution of total workload is specified,

1           14.     A method according to claim 13, wherein said SQL statements include  
2     insert, delete, update, and select SQL statement types.

1           15.     A method according to claim 14, wherein  
2           said insert SQL types have parameters including a number of identical insert  
3           statements, and wherein said insert statement SQL workload contribution is a function  
4           of said statement parameters,

5        said delete SQL types have parameters including a number identical delete  
6        statements, and wherein said delete statement SQL workload contribution is a  
7        function of said statement parameters,

8           said update SQL types have parameters including a number of records to be  
9   operated on by said update statement, and wherein said update statement SQL  
10 workload contribution is a function of said statement parameters, and

11 said select SQL types have parameters including selectivity criteria, and  
12 wherein said select statement SQL workload contribution is a function of said  
13 statement parameters.

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